

IEP Science Highlights

Director's Meeting Update

September 2016

Monitoring Highlights

- <u>Delta Smelt:</u> The 2016 20-mm survey *Delta Smelt* abundance index was 0.7, the 2nd lowest on record. The following Summer Townet Survey index was 0.0, matching the previous year's record low.
- <u>Striped Bass</u>: The 2016 Summer Townet Survey for age-0 *Striped Bass* was 2.2. This was a substantial improvement from 2015 index, and was comparable to 2011.
- <u>Salmon:</u> 2016 *Winter Run* Chinook Salmon escapement is likely to be quite low. Also telemetry estimates suggest that juvenile survival through the Delta did not improve substantially in 2016.

Targeted Study Highlights

- Harmful Algal Blooms: Microcystis blooms have been a recurring problem in the Delta since 1999, particularly in August and September. These blooms are becoming much more of a state-wide issue, with relatively high levels of cyanotoxins in many water project facilities.
- Aquatic Weeds: Recent UCD analyses supported by DFW drought funds suggest that there has been a major increase in aquatic weed coverage of the Delta. The 2015 estimate is that approximately 30% of open water in the Delta has aquatic weeds. This total includes 13,950 acres of submerged aquatic vegetation and 3,450 acres of floating aquatic vegetation.
- <u>Inshore Fishes:</u> DWR analyses of the FWS Beach Seine Survey data set suggest that there has been a major increase in biomass in inshore areas of the Delta. The change has been driven by invasive species, principally centrarchids and Inland Silversides.
- <u>Delta Smelt Resilience Strategy:</u> IEP Staff conducted a major field study in July to evaluate whether increasing summer flows through Yolo Bypass may have benefits for the downstream food web.

MAST (Management Analysis and Synthesis Team)

• Three new synthesis efforts are being initiated for 2017: aquatic weeds, ecosystem resilience to drought, and Longfin Smelt.

Workshops and Work Teams (see http://www.water.ca.gov/iep/activities/calendar.cfm)

• The Bay-Delta Science Conference is scheduled for November 2016.